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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/628,629	07/31/2000	Suhail S. Saquib	8445/RMD	3888

20349 7590 05/18/2006

POLAROID CORPORATION  
 PATENT DEPARTMENT  
 1265 MAIN STREET  
 WALTHAM, MA 02451

EXAMINER

BHATNAGAR, ANAND P

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/628,629	<b>Applicant(s)</b> SAQUIB, SUHAIL S.	
	<b>Examiner</b> Anand Bhatnagar	<b>Art Unit</b> 2623	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-10, 13-19, 26-34 and 41-49 is/are allowed.
- 6) ☒ Claim(s) 1, 11, 12, 20 and 35 is/are rejected.
- 7) ☒ Claim(s) 2-6, 21-25, and 36-40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

1. Applicant's appeal brief filed on 03/06/06 has been entered and made of record.
2. Examiner regrets to reopen this case at this time but upon updating the search, for possible allowance of this case, examiner came across a reference which examiner believes anticipates several of the claims of applicant's instant invention.
3. Applicant's arguments, see appeal brief pages 8-20, filed on 03/06/06, with respect to the rejection(s) of claim(s) 1-3, 5-7, 12, 20-22, 24-26, 35-37, and 39-41 under 35Usc 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Avinash et al. (U.S. patent 5,832,134).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 12, 20, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Avinash et al. (U.S. patent 5,832,134).

Regarding claims 1, 20, and 35: Avinash et al. discloses a method for filtering a digital input signal to produce a digital output signal (fig. 4 elements 33-45), the method comprising steps of:

(A) reducing a resolution of the digital input signal to produce a reduced resolution signal (fig. 4 element 33, col. 2 lines 15-21, and col. 4 lines 30-35, wherein the image data's resolution is spatially lowered);

(B) performing median filtering on the reduced resolution signal to produce a filtered reduced resolution signal (fig. 4 element 43, col. 2 lines 39-48, and col. 5 lines 49-57, wherein a median filter is applied and filters the reduced resolution image data. This filter is applied to the transition region pixels of the image signal. Since this applied to a part of the signal examiner reads it as being applied to the input signal.); and

(C) performing interpolation on the filtered reduced resolution signal to produce the digital output signal (fig. 4 element 45, col. 2 lines 49-63, and col. 6 lines 8-15, wherein the median filtered reduced resolution data undergoes the process of interpolation to get the output enhanced image signal).

Regarding claim 12: The method wherein the digital input signal comprises a two-dimensional signal (col. 2 lines 16-21, wherein the image data is composed of three dimensional data. the signal is composed of two-dimensional signal since it is three dimensional).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Avinash et al. (U.S. patent 5,832,134).

Regarding claim 11: The method wherein the digital input signal comprises a signal corresponding to a chrominance channel of a digital image.

Avinash et al. discloses to perform image enhancement by reducing the resolution of the image, then median filtering the reduced resolution data, and finally interpolating the filtered data to obtain an enhanced image (col. 2 lines 16-59). This process takes place on the pixels of the image, more specifically, to the intensities, i.e. luminance, of the pixels. Avinash et al. does not disclose to perform this process on the chrominance channel of the pixels. However, examiner takes OFFICIAL NOTICE since it is obvious in the art of image processing to “wherein the digital input signal comprises a signal corresponding to a chrominance channel of a digital image.” It would have been obvious to one skilled in the art to modify the system wherein the process of resolution reduction, then median filtering, and finally interpolation can be performed on any

pixel variable of the image (such as hue, saturation, chrominance, etc.) so that the color of the image maybe also be enhanced just as the image's intensity.

***Allowable Subject Matter***

6. Claims 7-10, 13-19, 26-34, and 41-49 are allowed.
7. Claims 2-6, 21-25, and 36-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Stapleton (U.S. patent 6,124,893) for image transformation and interpolation.

***Contact Information***

9. Any inquiry into this communication should be directed to Anand Bhatnagar whose telephone number is 571-272-7416, whose supervisor is Jingge Wu whose number is 571-272-7429, group receptionist is 703-305-4700, and Central fax is 571-273-8300.

AB

Anand Bhatnagar

Technology Division 2624

May 8, 2006

JINGGE WU  
PRIMARY EXAMINER